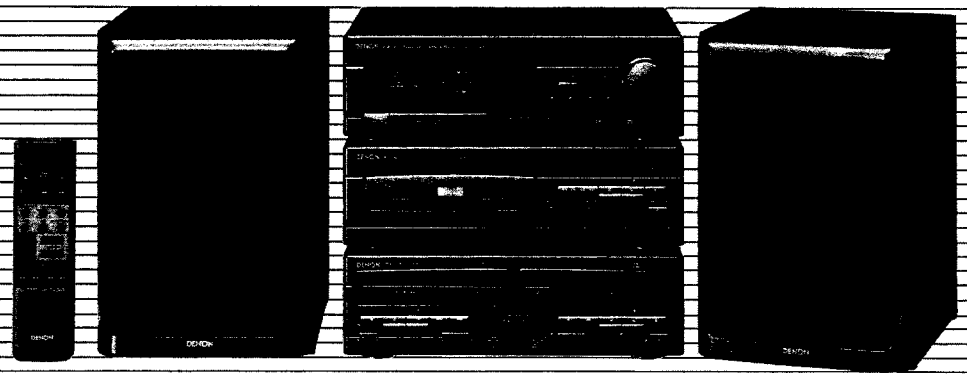
DENON

STEREO COMPONENT SYSTEM

D-60

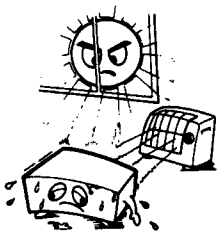
OPERATING INSTRUCTIONS
BEDIENUNGSANLEITUNG
MODE D'EMPLOI

COMPACT disc DIGITAL AUDIO

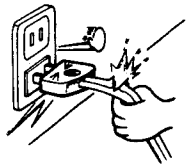


FOR ENGLISH READERS PAGE 4 ~ PAGE 25
FÜR DEUTSCHE LESER SEITE 26 ~ SEITE 47
POUR LES LECTEURS FRANCAIS PAGE 49 ~ PAGE 69

NOTE ON USE / HINWEISE ZUM GEBRAUCH / OBSERVATIONS RELATIVES A L'UTILISATION

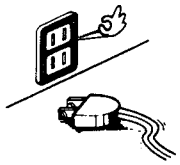


- Avoid high temperatures
  Allow for sufficient heat dispersion when installed on a rack.
- Vermeiden Sie hohe Temperaturen
  Beachten Sie, daß eine zureichende Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.
- Eviter des températures élevées
  Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.

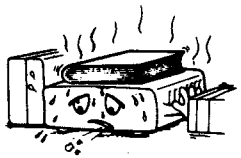


- Handle the power cord carefully.
  Hold the plug when unplugging the cord.
- Gehen Sie vorsichtig mit dem Netzkabel um.
  Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.
- Manipuler le cordon d'alimentation avec précaution.
  Tenir la prise lors du débranchement du cordon.

- Keep the set free from moisture, water, and dust.
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.

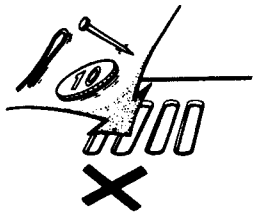


- Unplug the power cord when not using the set for long periods of time.
- Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.

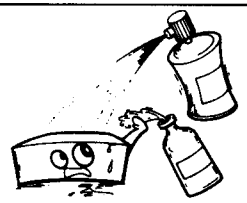


*(For sets with ventilation holes)

- Do not obstruct the ventilation holes.
- Die Belüftungsöffnungen dürfen nicht verdeckt werden.
- Ne pas obstruer les trous d'aération.



- Do not let foreign objects in the set.
- Keine fremden Gegenstände in das Gerät kommen lassen.
- Ne pas laisser des objets étrangers dans l'appareil.



- Do not let insecticides, benzene, and thinner come in contact with the set.
- Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.

- Never disassemble or modify the set in any way.
- Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.

Irregularities

- If the system should smoke or produce strange smells, immediately set the power switch to the STANDBY position, unplug the power cord, and contact your store of purchase.

Unregelmäßigkeiten

- Sollte das Gerät Rauch produzieren oder eigenartig riechen, stellen Sie den Netzschalter sofort auf die Position STANDBY (Bereitschaft), ziehen Sie den Netzstecker heraus und kontaktieren Sie Ihren Händler.

Anomalies

- Si de la fumée sort de la chaîne ou des odeurs bizarres, placer l'interrupteur d'alimentation immédiatement sur la position de veille (STANDBY), débrancher le cordon d'alimentation et contacter le distributeur.

"SERIAL NO. _____
PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"

3 CONNECTIONS

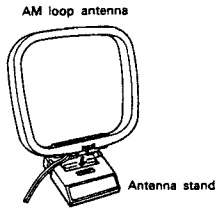
CAUTION

- Do not plug the power cord into the power outlet until all connections are completed. Connect properly as shown in the diagram.
- Check the right and left channels, and be sure to connect the speaker's L terminals to the amplifier's L terminals, the speaker's R terminals to the amplifier's R terminals.
- Be sure to insert the plugs securely. Incomplete connections can cause noise.
- This system includes digital circuitry, so it may cause problems with the colors on a TV. If so, turn the system's power switch off.
- Note that if the input jacks selected with the FUNCTION selectors are open (if nothing is connected), the sound may leak to another component connected to different input jacks.
- Note that grouping connection cords (pin-plug cords) together with power cords or setting them near power transformers can cause noise.
- This system consists of precision components using microprocessors. Avoid using it in places where there is much external noise. The system may not operate properly if used in is such places, but this is not a problem with the system. If it should function improperly, perform the desired operation once again.

PREPARE

1 Assembling the Loop Antenna

Assemble the included AM loop antenna as shown in the diagram.



① Undo the clasp.
② Insert the AM loop antenna into the antenna stand.

2 Connecting the System Connector Cord

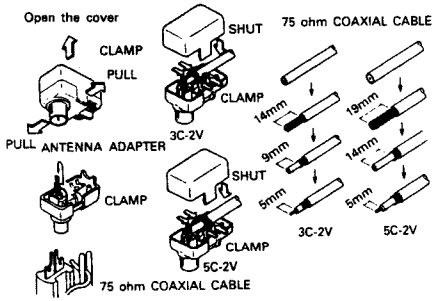
When connecting the system connector cord, press on the center of the connector plug until you hear a click. When disconnecting the system connector cord, press the sides of the connector plug towards the middle and pull.

NOTE

- Note that disconnecting by pulling on the cord can damage it.
- Keep the power cord unplugged when connecting the system connector cord.
- Note that connecting the system connector cord when the power cord is plugged into a power outlet may result in improper operation.

3 Connecting the Included Antenna Adapter

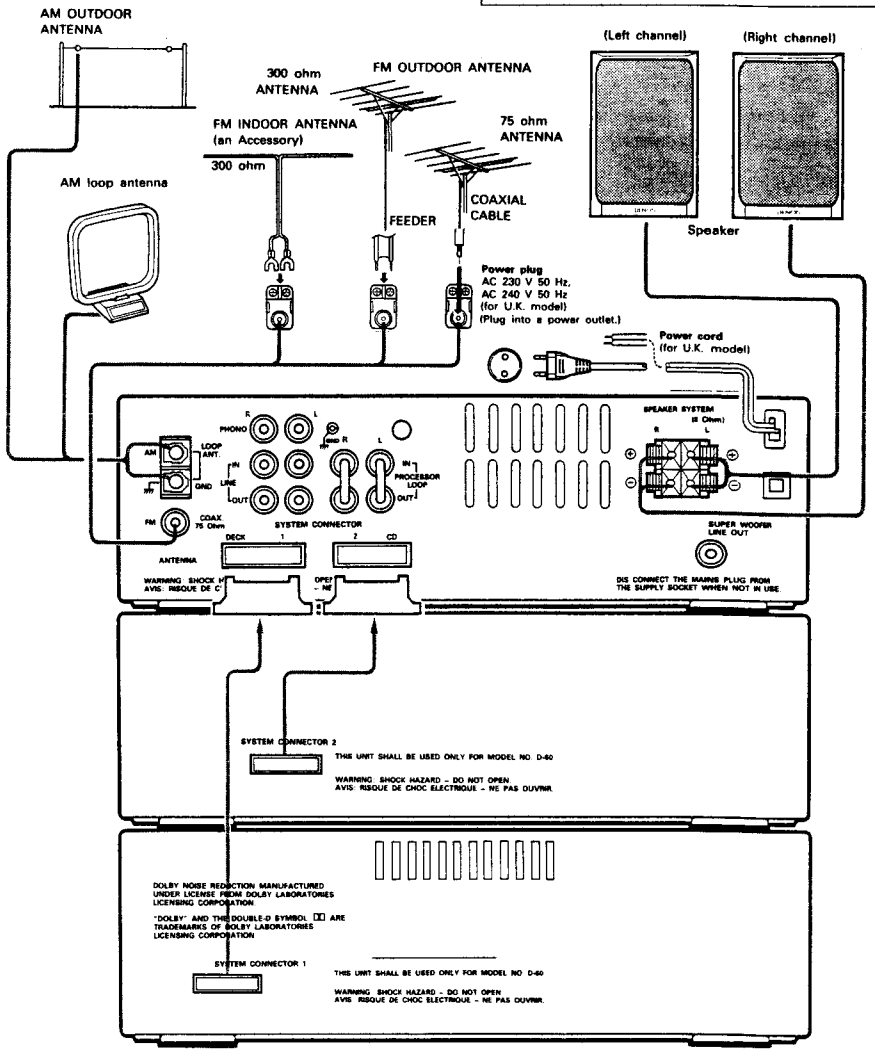
Connect the coaxial cable and antenna adapter using the procedure on the diagram below.



SYSTEM CONNECTIONS

Keep the FM and AM antenna wires away from the system connector wire to prevent noise from entering the antennas.

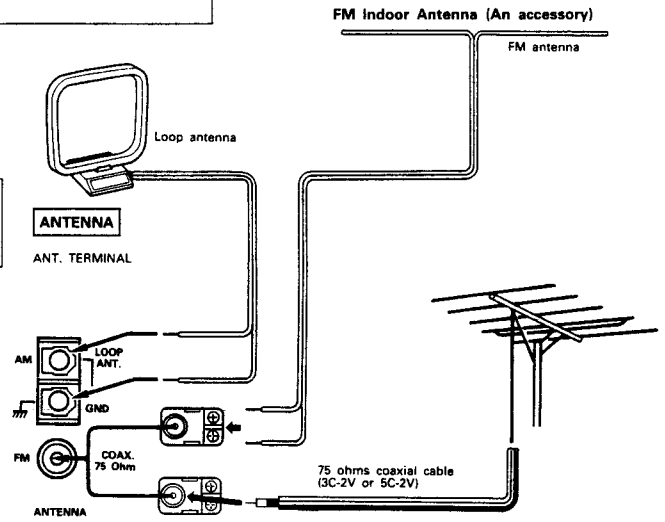
Speaker system connections
Connect the speaker system for the left channel (the left side as seen from the front) to the L terminals, the speaker system for the right channel to the R terminals. Connect the speaker systems before inserting the system connector.



ANTENNA CONNECTIONS

Installing the AM Loop Antenna
Tune in an AM station (refer to Page 12), listen to the sound, then install the antenna in a position as far from the set as possible in which distortion and noise are minimum. In some cases it is better to connect with the polarities inverted. Good reception of AM stations is not possible if the loop antenna is not connected or if it is touching metal objects.

Connect the antenna to the FM terminals (refer to page 12), tune in an FM broadcast, then move the antenna to find a position in which distortion and noise are minimum. Secure the ends of the antenna in that position using tape, tacks, etc.



Refer to Page 5 for instructions on connecting the antenna terminal cords.

CAUTION
Use an outdoor antenna if reception is not good with the included antenna. Change the location, height, and direction of the antenna to find the position where reception is best, then fix the antenna in that position.

Connect the outdoor antenna using a 75 ohms coaxial cable. This protects against external noise.

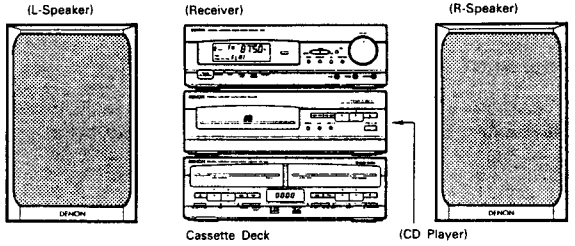
Places for Installing Outdoor Antennas
- Install the outdoor antenna facing a broadcast station's transmission antenna.
  When surrounded by buildings or hills, try changing the direction to obtain optimum reception.
- Do not install the antenna under power lines.
  It is extremely dangerous for the antenna to come into contact with a power line.
- Install away from roads or train tracks to prevent noise from cars and trains.
- Do not install the antenna too high, as it may be hit by lightening.

INSTALLING THE SETS

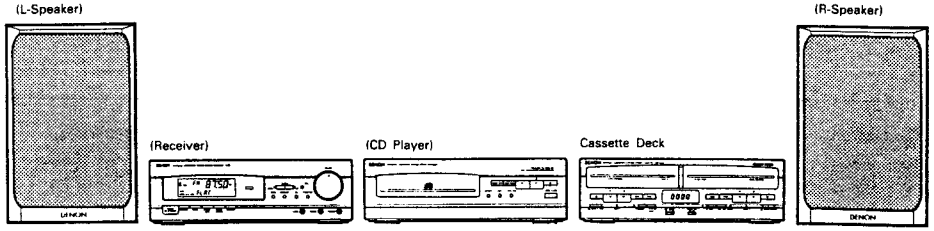
After completing the system connections and antenna connections, install the sets as shown on the diagrams below.

[Stacking]

CAUTION:
Set the receiver (UDRA-60) on the top.

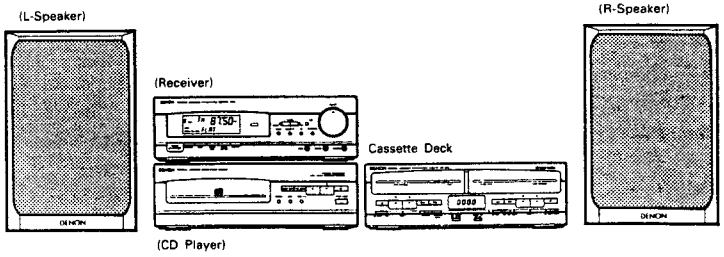


[Installing Side by Side]



[Partial Stacking]

CAUTION:
Set the receiver (UDRA-60) on the top.



CAUTION:
- Do not plug the power cord into the power outlet until all connections are completed. Connect properly as shown in the diagram.
- This system includes digital circuitry, so it may cause problems with the colors on a TV. If so, turn the system's power switch off.

4 PART NAMES AND FUNCTIONS

RECEIVER

❶ **POWER ON/STANDBY switch**
When pressed once, the power turns on and the display lights up. The set will begin to function normally approximately 4 to 5 seconds after the power is turned on. Press the button again to turn the power off.

❷ **STANDBY (timer standby) button**
Press this button to turn the timer on. When pressed once, the standby indicator (◷) appears on the display, and when pressed again, the standby indicator turns off. The timer will not function when the standby indicator is off.

❸ **TIMER button**
This is used to set the timer.

❹ **ENTER/NEXT button**
Use this to move on to the next step when setting the clock and timer.

❺ **CLOCK/DISPLAY button**
Press once to display the time, once again to return to the previous display.

❻ **MEMORY button**
Use this to store reception frequencies and modes at the preset channels.

❼ **Remote control sensor**
This is where the signals from the remote control unit are received.

❽ **BAND selector button**
Use this to switch between the FM, AM (MW) and AM (LW) bands. The band changes each time the button is pressed, and the currently set band is indicated on the display.

❾ **TUNING UP and DOWN buttons**
Use these to tune in FM or AM (MW and LW) stations and when setting the clock and timer.

❿ **PRESET EQ (equalizer) button**
Use this to switch the equalizer setting.

⓫ **SDB (Super Dynamic Bass) button**
Press this button for more powerful bass sound.
Press again to turn the SDB function off.

⓬ **FUNCTION selectors**
Use these to select the program source.

⓭ **VOLUME control**
Use this control to adjust the volume.
Turn clockwise (↷) to increase the volume, counterclockwise (↶) to decrease it.

⓮ **MONO/ST. (FM stereo mute/mono) selector button**

> **CAUTION:**
> This button will not function when receiving AM broadcasts.

(For FM reception)
STEREO: Use this mode to receive FM broadcasts in stereo. ("AUTO" appears on the display.) The muting circuit is activated to cut noise between stations.
MONO: In this mode, FM broadcasts are received in monaural, regardless of whether they are broadcast in monaural or stereo.
Set to the mono mode if there is much noise in the stereo mute mode (with "AUTO" displayed) or if the signals are weak.

⓯ **BASS control**
Use this to adjust the bass.

⓰ **TREBLE control**
Use this to adjust the treble.

⓱ **PHONES jack**
When using headphones, plug them in here.
The sound from the speakers is cut when headphones are plugged in.
Use headphones equipped with a stereo mini-plug (3.5mm in diameter).

CD PLAYER

❶ **Disc tray**
Load discs here.

❷ **⏮ ◀◀ (automatic/manual search reverse button)**
Press this button to move the pickup back to the beginning of the desired track.
Press in the play or pause mode to move back a number of tracks equal to the number of times the button is pressed.

❸ **▶▶ ⏭ (automatic/manual search forward button)**
Press this button to move the pickup forward to the beginning of the desired track.
Press in the play or pause mode to move forward a number of tracks equal to the number of times the button is pressed.
* The automatic search function is set if the button is released within 0.5 seconds, and the manual search function is set if the button is held in for more than 0.5 seconds.

❹ **II PAUSE button**
Press this button to stop playback temporarily.
Press the PLAY button to resume playback.

❺ **▶ PLAY button**
Press this button to start playing the disc.
If pressed when the disc holder is open, the disc holder closes and playback begins.

❻ **■ STOP button**
Press this button to stop playback.

❼ **REPEAT button**
Press this button for repeat playback.

❽ **EDIT button**
Press this button for edited recording (dividing the tracks to be recorded to fit onto sides A and B of a tape according to the tape's length).

❾ **TAPE A/B button**
Press this button during editing to switch the display between the display for side A and the display for side B of the tape.

❿ **⏏ OPEN/CLOSE button**
Press this to open and close the disc holder.
The disc holder opens out when the button is pressed once, and closes when the button is pressed again. If a disc is loaded, the total number of tracks and total time of that disc appears on the display several seconds after the disc holder is closed.

⓫ **Disc play indicator**
This lights when a disc is playing, and flashes when in the pause mode.

CASSETTE DECK

❶ **Cassette tray: Deck 1**
The cassette tray opens out when the OPEN/CLOSE button ⓱ is pressed. Insert the cassette tape with the side on which the tape is exposed facing away from you. To close the cassette tray, press the OPEN/CLOSE button ⓱ again.

❷ **Tape direction indicators: Deck 1**
These indicate the direction of playback of the tape in Deck 1 as well as whether or not a tape is loaded. The indicators flash when the tape is being fast-forwarded or rewound. The tape direction indicators for Deck 2 remain off when the tape in Deck 1 is moving.

❸ **◀◀ (rewind) button: Deck 1**
Press this to rewind the tape in Deck 1. Also, if pressed during playback in the ▶ (forward) direction, the tape is rewound to the beginning of the currently playing selection, and if pressed during playback in the ◀ (reverse) direction, the tape is forwarded to the beginning of the next selection (on the back side of the tape).

❹ **▶▶ (fast-forward) button: Deck 1**
Press this to fast-forward the tape in Deck 1. Also, if pressed during playback in the ▶ (forward) direction, the tape is fast-forwarded to the beginning of the following selection, and if pressed during playback in the ◀ (reverse) direction, the tape is rewound to the beginning of the currently playing selection (on the back side of the tape).

❺ **Cassette tray: Deck 2**
When the OPEN/CLOSE button is pressed, the cassette tray opens out. Place the cassette tape in the tray with the side on which the tape is exposed facing the back. To close the cassette tray, press the OPEN/CLOSE button again.

❻ **Tape direction indicators: Deck 2**
These indicate the direction of playback of the tape in Deck 2 as well as whether or not a tape is loaded. The indicators flash when the tape is being fast-forwarded or rewound. The tape direction indicators for Deck 1 remain off when the tape in Deck 2 is moving.

❼ **▶▶ (fast-forward) button: Deck 2**
Press this to fast-forward the tape in Deck 2. Also, if pressed during playback in the ▶ (forward) direction, the tape is fast-forwarded to the beginning of the following selection, and if pressed during playback in the ◀ (reverse) direction, the tape is rewound to the beginning of the currently playing selection (on the back side of the tape).

❽ **◀◀ (rewind) button: Deck 2**
Press this to rewind the tape in Deck 2. Also, if pressed during playback in the ▶ (forward) direction, the tape is rewound to the beginning of the currently playing selection, and if pressed during playback in the ◀ (reverse) direction, the tape is forwarded to the beginning of the next selection (on the back side of the tape).

❾ **▶ (forward play) button: Deck 1**
Press this button to begin playback in the forward direction on Deck 1.

❿ **Deck 1 indicator**
This indicator lights when Deck 1 is selected.
This indicates the deck for which the counter is functioning. Normally, the indicator on the deck which has been operated lights.

⓫ **◀ (reverse play) button: Deck 1**
Press this button to begin playback in the reverse direction on Deck 1.

⓬ **■ (stop) button: Deck 1**
Press this button when the tape in Deck 1 is moving to stop the tape.

⓭ **◀ (reverse play) button: Deck 2**
Press this button to begin playback in the reverse direction on Deck 2.

⓮ **Deck 2 indicator**
This indicator lights when Deck 2 is selected.
This indicates the deck for which the counter is functioning. Normally, the indicator on the deck which has been operated lights.

⓯ **▶ (forward play) button: Deck 2**
Press this button to begin playback in the forward direction on Deck 2.

⓰ **■ (stop) button: Deck 2**
Press this button when the tape in Deck 2 is moving to stop the tape.

The tape direction indicators for Decks 1 and 2 (❷ and ❻) also indicate whether or not cassette tapes are loaded. The indicators remain off if no cassette tape is loaded when in the stop mode.

⓱ **▲ OPEN/CLOSE button: Deck 1**
Press this button to open and close the cassette tray.

⓲ **▲ OPEN/CLOSE button: Deck 2**
Press this button to open and close the cassette tray.

⓳ **Dubbing indicator**
This lights during dubbing.

⓴ **DUBBING button**
Dubbing (copying) a tape from Deck 1 onto Deck 2 is possible simply by pressing this button.

㉑ **COUNTER RESET button**
Press this button to reset the tape counter to '0000'.

㉒ **REV. MODE switch**
Use this to set the reverse mode to one of the following modes: ⇄ (Single side mode), ⇉ (Double side [reverse] mode), ↻ (continuous mode).
Refer to Page 18.

㉓ **DOLBY NR selector switch**
Use this switch to select the Dolby NR mode, ON, OFF. During playback, set this switch to the same mode in which the tape was recorded.

㉔ **CD SRS indicator**
This lights during recording with the CD SRS function.

㉕ **CD SRS (CD synchronized recording button)**
Use this button for CD synchronized recording. Refer to Page 22.

CD SRS button
This button is used for recording CDs (Page 22). Pay attention to the following:
① Recording begins on the tape as soon as this button is pressed, so be sure to wind up the leader tape beforehand.
② If this button is pressed while a CD is playing, the CD SRS indicator (㉔) lights but recording onto the tape does not begin. Stop the CD first before pressing this button.

㉖ **REC/REC MUTE (recording/recording mute) button**
To record, press the REC/REC MUTE button, then press the ▶ or ◀ button.
If only the REC/REC MUTE button is pressed, the deck is set to the recording pause mode. If this button is pressed during recording, the recording mute mode is set for approximately 5 seconds, after which the deck is set to the recording pause mode. To resume recording, press the ▶ or ◀ button.

When the REC/REC MUTE button is pressed while the cassette deck is in the stop mode, a blank section of approximately 5 seconds is created on the tape, after which the deck is set to the recording pause mode. If the REC/REC MUTE button is held in, a blank section is created on the tape until the point where the button is released.

Recording pause mode
Recording of the CD begins if the CD player's PLAY key is pressed during the recording pause mode.

㉗ **REC/REC MUTE indicator**
This lights when the recording or recording standby mode is set using the REC/REC MUTE button ㉖, and flashes during the recording mute mode.

㉘ **Tape counter**
The tape counter functions for the deck whose indicator (❷ or ❻) is lit.

NOTE
- After the power cord is plugged into an outlet, a mechanical sound is produced from the cassette deck when the power switch is turned on the first time only. This is the sound of the cassette mechanism being set to the proper operating position, and is not a problem with the deck.

RECEIVER DISPLAY

On this system, the receiver includes a multi-display.
This display indicates various types of information for different modes depending on which section of the system is being used, as follows:

When listening to the radio or when using the timer ..... See diagram below.
When listening to a CD ..... Refer to Page 9.
When listening to a tape ..... Refer to Page 10.

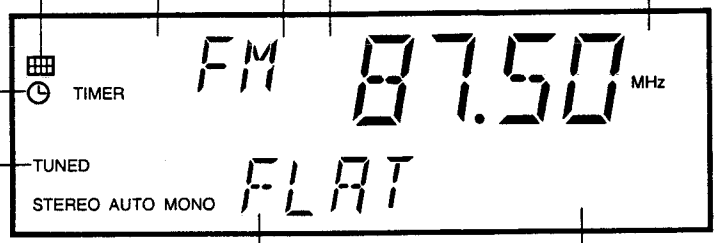
This lights to indicate that the timer is set.

This lights when signals are received from the remote control unit.

This indicates the band being received [AM (MW and LW) or FM] and the preset number when presetting stations in the memory.

The reception frequency, function, time, and timer settings are displayed here.

NOTE:
- The timer standby mark " ◷ " will not light if the current time is not set.



This lights when the station is tuned in properly.

When presetting stations in the memory : "MEMORY"
When setting the timer times : "ON" or "OFF"
When recalling a preset station : Preset number
When the sleep timer is operating : "SLEEP"
When an equalizer setting is selected : Equalizer mode
During muting : "MUTING"
* Normally the equalizer setting is displayed.

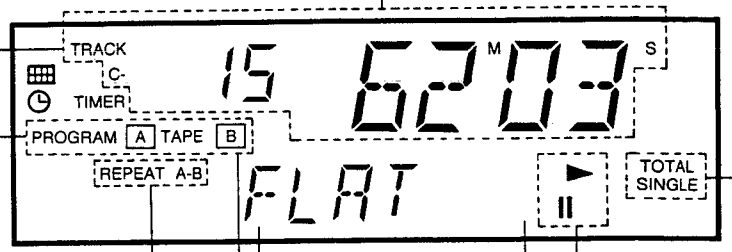
CD PLAYER DISPLAY

Tape type and remaining time display
During the editing function, C-00 lights and the tape time is displayed.

These indicate the time display mode.
TOTAL lights when the remaining time for all tracks is displayed.
SINGLE lights when the remaining time per track is displayed.

Track number display
00 is displayed when the disc data cannot be read properly.
When a disc is loaded:
- The total number of tracks is displayed in the stop mode.
- The track number is displayed in the play and program modes.
- [[or]] is displayed when the innermost or outermost section of the disc is reached in the manual search mode.

Time display
0000 is displayed when the disc data cannot be read properly.
When a disc is loaded:
- The elapsed playing time is displayed in the stop mode.
- The elapsed time for the track currently playing is displayed in the play and pause modes.
- The elapsed time for the programmed tracks is displayed in the program mode.



PROGRAM lights during the programmed search mode.

▶ PLAY lights when the disc is playing, and ❚❚ PAUSE lights when in the pause mode.

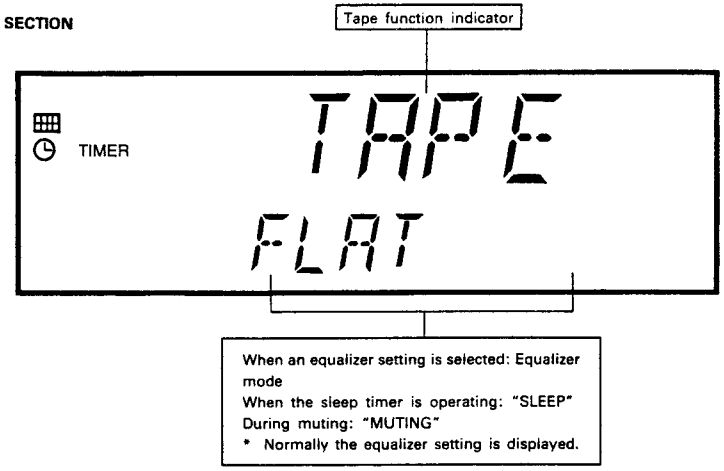
The indicators switch as follows when the REPEAT button is pressed in the play mode:
First press : REPEAT TRACK
Second press : REPEAT ALL
Third press : REPEAT A
Fourth press : REPEAT A-B
Fifth press : None Display

During editing operations: "REMAIN"
During edited recording: "EDIT"
When no disc is loaded, when the disc is loaded upside-down, or when the disc is heavily scratched or dirty : "NO DISC"

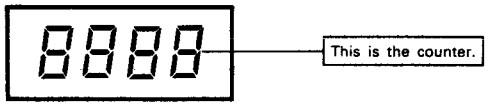
During the editing operation, "EDIT A TAPE" is displayed and the remaining time for side A of the tape is indicated on the time section of the display. When the TAPE SIDE A/B button is pressed, " A " turns off, " B " turns on, and the remaining time for side A of the tape is indicated in the same way.
The ▶ PLAY indicator lights when a disc is playing, and the ❚❚ PAUSE indicator lights when the pause mode is set.

CASSETTE DECK DISPLAY

RECEIVER SECTION



CASSETTE DECK SECTION



Remaining Tape Indicators

These indicators notify that the tape is reaching the end during recording and playback. The indicators differ according to the diameter of the tape hub.

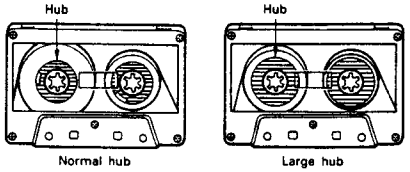
This starts flashing when the tape is nearing the end during recording or playback, then stops flashing and remains lit once the end of the tape is reached.

* The approximate remaining time on the tape after the different sections of the tape counter start flashing one by one is as follows:

Hub diameter / Tape length	Normal hub		Large hub	
	Playback in forward direction	Playback in reverse direction	Playback in forward direction	Playback in reverse direction
C-46	Approx. 5 minutes	Approx. 5 minutes	Approx. 1 minutes	Approx. 1 minutes
C-60	Approx. 5 minutes	Approx. 5 minutes	Approx. 1 minutes	Approx. 1 minutes
C-90	Approx. 6 minutes	Approx. 6 minutes	–	–

* There are no C-90 tapes with large hubs.

* Large hubs are hubs with a diameter of about 27mm. Note that if the hub is larger than this, there may be a major error in indicating the remaining time.



NOTE

The remaining tape times shown on the table at the right are only rough estimates. In addition, the tape end indication may not work when using cassettes with thick tapes or cassettes on which the diameter of the wound tape is large.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol ⧈ is trademarks of Dolby Laboratories Licensing Corporation.

5 REMOTE CONTROL UNIT

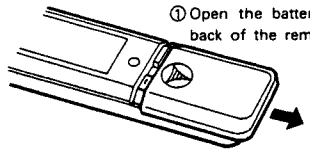
The D-60 comes with a remote control unit (RC-148) for system control.

Cautions on Use

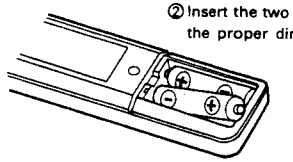
- Use R6P/AA batteries in the remote control unit.
- Replace the batteries with new ones after approximately one year of use, though this time depends on the frequency with which the remote control unit is operated.
- If the remote control unit does not function when operated from close to the main unit, replace the batteries with new ones, even if the previous batteries have been used for less than a year.
- Insert the new batteries in the proper "+" and "–" directions, following the marks on the remote control unit's battery compartment.
- To make the batteries last longer, remove them when not using the remote control unit for long periods of time.
- To prevent damage or leakage of battery fluid:
  - Do not use an old battery together with a new one.
  - Do not use two batteries of different types together.
  - Do not short-circuit, take apart, heat, or dispose of batteries in flames.
- If the battery fluid should leak, carefully wipe all the battery fluid off the inside of the battery compartment, then insert new batteries.

Inserting the Batteries

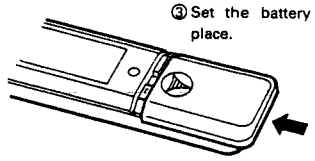
① Open the battery case lid on the back of the remote control unit.



② Insert the two batteries (R6P/AA) in the proper direction.



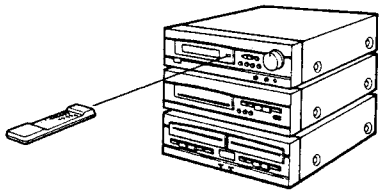
③ Set the battery case lid back in place.



Remote Control Unit

CAUTIONS:

- The remote control unit may not function properly if the infrared sensor (remote control sensor) is exposed to direct sunlight or other strong light, or if there is an obstacle between the remote control unit and the remote control sensor.
- When adjusting the volume from the remote control unit, the volume will stop changing if the remote control transmitter is moved away from the remote control sensor. Press the button again to continue changing the volume.
- The "signal received" mark "▦" does not light when the EQ key on the remote control unit is pressed.
- If ▦ appears on the tuner's display due to incidental light even though the remote control unit has not been operated, it is best to move the set or place it in a different direction. However, this will not cause malfunction.
- Do not press buttons on the remote control unit and on the main unit at the same time. This will lead to malfunction.
- When the MUTE button on the remote control unit is pressed, the sound is muted and remains muted when the power switch is turned off then turned back on. In such cases, press the MUTE button on the remote control unit again.



The remote control sensor is located on the right side of the display window on the receiver. Point the remote control unit at the sensor when using it, as shown in the diagram. The remote control unit will function from a maximum direct distance of approximately 7 meters. This distance will decrease, however, if there is an obstacle between the remote control unit and the sensor, or if used the remote control unit is used from an angle.

The "▦" mark lights in the bottom corner of the receiver's display when signals are received from the remote control unit.

POWER button

Press this to turn the power for the entire system on and off.

Operating the Cassette Decks

OPEN/CLOSE (⏏)
Press this to open and close the cassette trays.

DECK 1/2
Press this to select the deck to be operated.

Stop button (■)
Press this to stop the tape.

Forward play button (▶)
Press this to play or record in the forward direction.

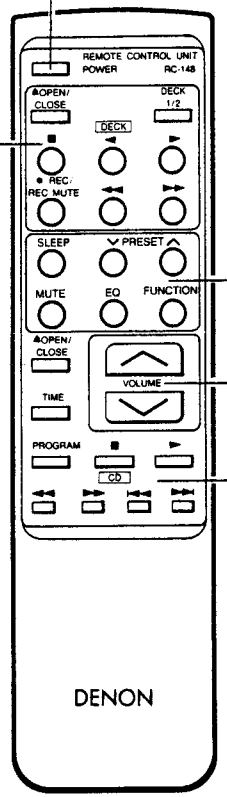
Reverse play button (◀)
Press this to play or record in the reverse direction.

REC/REC MUTE (recording mute button) (●)
To set to the recording mode when in the stop mode, press this button, then press either the "▶" or "◀" button. When pressed during the recording or recording pause mode, a blank section of approximately 5 seconds is created on the tape, after which the deck is set to the recording pause mode.

Rewind button (◀◀)
Press this to rewind the tape.

Fast-forward button (▶▶)
Press this to fast-forward the tape.

All operations marked [R] from the following page on are possible using the remote control unit.



NOTE:
If the open/close button on the remote control unit is pressed and the disc tray is opened or closed when no disc is loaded, the remote control operation is given priority, and nothing will happen when the play button or other buttons on the main unit are pressed.
If this happens, press the open/close button on the main unit before using it.

Operating the Receiver

SLEEP
Press this to set the sleep timer.

PRESET
Press these to tune in preset stations.

MUTE
When pressed once, the sound is muted, and when pressed again, the volume returns to the previous setting.

EQ
Press this to select an equalizer setting suitable for the type of music you are currently listening to.

FUNCTION (function selector)
Press this to switch the function between TUNER, TAPE, CD, PHONO and LINE.

VOLUME
Use these to adjust the volume. The volume decreases when the V button is pressed, and increases when the Λ button is pressed.

Operating the CD Player

OPEN/CLOSE (⏏)
Press this to open and close the disc tray.

TIME
The time on the display switches as follows each time this button is pressed: Remaining time per track → Total remaining time → Elapsed time per track.

PROGRAM
Use this for programming tracks.

Stop button (■)
Press this to stop playback.

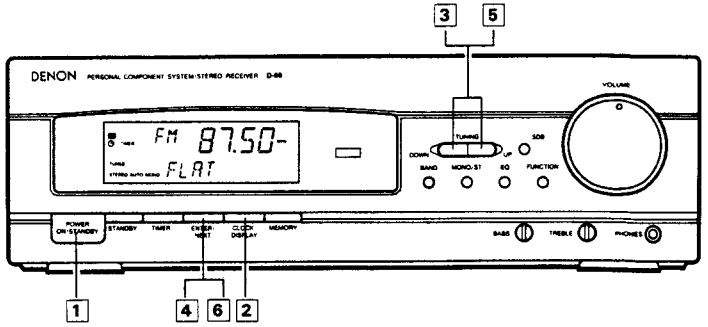
Play button (▶)
Press this to start playback.

Manual search reverse button (◀◀)
Manual search forward button (▶▶)
Use these to forward or reverse the CD.

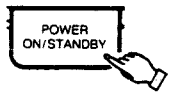
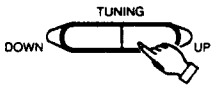
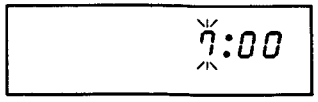
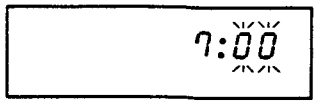
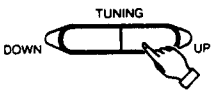
Auto search reverse button (I◀◀)
Auto search forward button (▶▶I)
Use these to search for the beginning of the desired track.

[6] SETTING THE CURRENT TIME

Setting the Current Time (The time is displayed in the 24-hour mode)

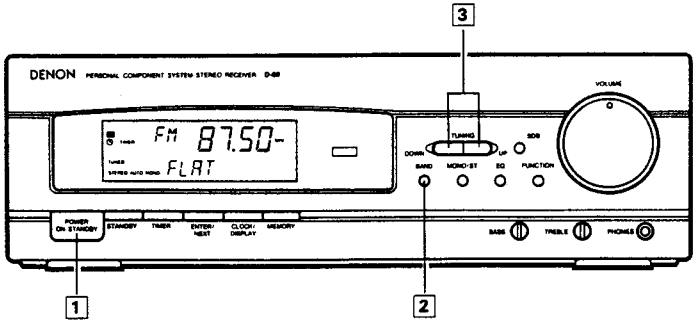


Example: Setting the time to 7:30 (The time is displayed in the 24-hour mode.)

1	Press the POWER ON/STANDBY button to turn the power on.		
2	Press the CLOCK/DISPLAY button, and hold it in for at lease 3 seconds.		
3	Use the UP and DOWN buttons to set the hours.		
4	Press the ENTER/NEXT button.		
5	Use the UP and DOWN buttons to set the minutes.		
6	Press the ENTER/NEXT button at the sound of a time service's chime. The time display stops flashing, and the clock starts counting the time.		

7 LISTENING TO RADIO BROADCASTS

TUNING



(Example: Tuning to FM 102.50 MHz)

1	Set the VOLUME control to the "MIN" position, then press the POWER ON/ STANDBY button to turn the power on.	POWER ON/STANDBY	
2	Select the FM band with the BAND button.	BAND	FM 87.50 MHz AUTO MONO FLAT
3	Use the UP and DOWN buttons to tune to 102.50 MHz.	TUNING DOWN UP	FM 102.50 MHz AUTO MONO FLAT

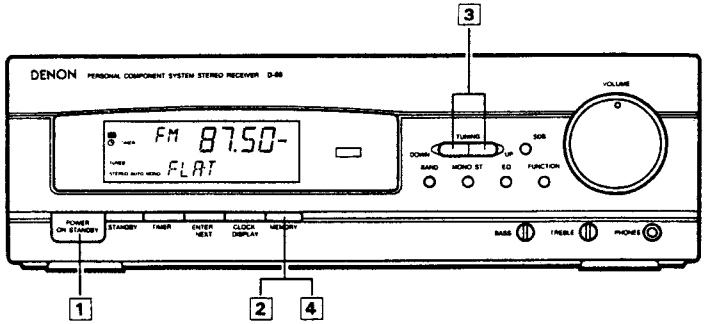
FM stereo reception

- Press the MONO/ST button to turn the "AUTO MONO" indicator on. When an FM stereo broadcast is received, the "STEREO" indicator lights and the broadcast is received in stereo.
- When the MONO/ST button is pressed and the "MONO" indicator is turned on, the "STEREO" indicator turns off and the broadcast is received in monaural.

Note:

Use the same operation to receive AM (MW or LW) stations.

Presetting AM and FM stations



Example: Presetting FM 102.50 MHz (currently tuned in) to preset button 3

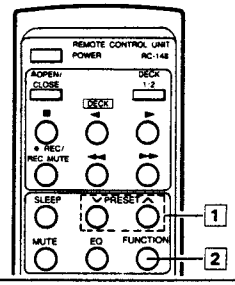
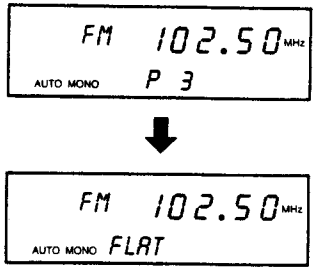
1	Set the VOLUME control to the "MIN" position, then press the POWER ON/ STANDBY button to turn the power on.	POWER ON/STANDBY	
2	Press the MEMORY button. The "MEMORY" indicator flashes.	MEMORY	P-- 102.50 MHz AUTO MONO MEMORY
3	Use the UP and DOWN buttons to call out the number at which you want to preset the station. The preset number flashes.	TUNING DOWN UP	P 3 102.50 MHz AUTO MONO MEMORY
4	Press the MEMORY button while the preset number is flashing.	MEMORY	FM 102.50 MHz AUTO MONO P 3 After 1 second, the preset number switches to the preset tone display.
"MEMORY" flashes for 10 seconds.			

Notes on Presetting

- When an FM station is preset, the auto or monaural mode is also set, so check the display before presetting the station.
- If a station is preset at a button at which another station has previously been preset, the previous station is cleared and the new station is preset.
- The preset memory is not cleared immediately if the power cord is unplugged, but will be cleared if the cord is left unplugged over a long period of time. If this happens, preset the stations again. The memory is backed up for 24 hours.

Listening to Preset Stations

Example: Listening to the FM station preset at button 3: (Remote Control only)

1	Press the FUNCTION button on the remote control unit to call out "TUNER".	 
2	Use the PRESET buttons to call out "3".	

8 PLAYING CDs

Compact Discs

■ Discs which can be played

COMPACT disc DIGITAL AUDIO

Only discs with this mark can be played.

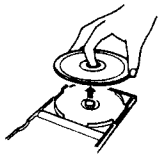
- For CDVs, only the audio part is played (the video part is not played).

Disc	Remarks
CD	
CDV	Only the audio part is played.
CD single (8 cm)	

Loading Discs

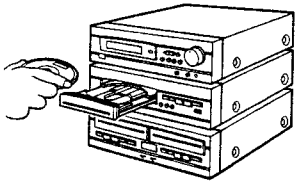
■ When removing the disc from its case:

As shown in the diagram, grasp the disc along the edges, gently press down on the hole in the middle with a finger, and lift the disc. It should come out easily.



■ When setting the disc in the disc tray:

Always set the disc with the labelled side facing up. (Compact discs can only be played on one side.) For 8 cm CDs, set the disc in the sunken part in the middle of the tray.

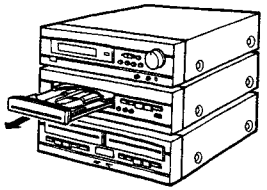


- Load the disc with the disc holder open.
- Press the OPEN/CLOSE button (⏏) once to open the disc tray, once again to close it.
- Set the disc securely in the tray guide at the center of the disc holder.
  To play 8cm discs, place the disc in the sunken part at the center of the disc holder.
- Load discs with the labelled side facing up, being careful not to touch the disc surface.
- The disc tray can also be closed by pressing the PLAY (▶) button.
  In this case, playback automatically starts from the first track on the disc (or if tracks are programmed, the first programmed track).
- When the disc holder is closed, the disc turns automatically for several seconds, and the number of tracks and total playing time appear on the display.

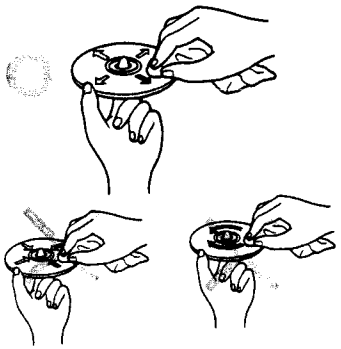
Handling the Disc Tray

Do not turn off the power or push or pull the disc tray when it is moving, as this may damage it.
If the cord of a set of headphones, etc., gets caught in the disc tray when it is closed, press the OPEN/CLOSE button (⏏) again.

- Never set objects other than CDs in the disc tray, as this can cause damage.



- **Cleaning Discs**



Dust, fingerprints, or spittle on the disc can cause noise or skipping.
If the disc is dirty or if the player does not work properly, clean the disc as follows:

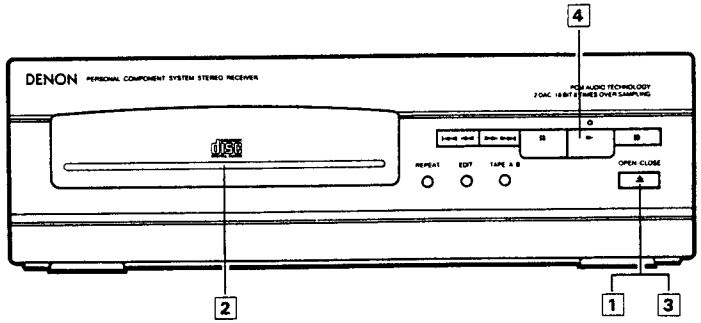
- Hold the disc as shown in the diagram, with the signal surface facing up (the labelled side facing down).
- Using a soft cloth, wipe the disc gently from the inside towards the edges in straight lines (as shown by the arrows).

> - Do not wipe from the edges towards the center or around the disc as you would wipe records.
> - Do not use hard cloths or rub the disc, since this can scratch the signal surface.

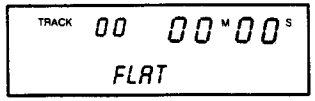
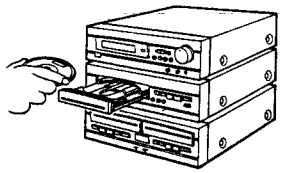
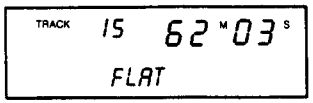
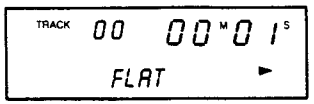
Never use the following to clean discs:

- Solvents such as benzene or alcohol
- Cleaners containing abrasives
- Sprays or cleaner for records
- Anti-static products

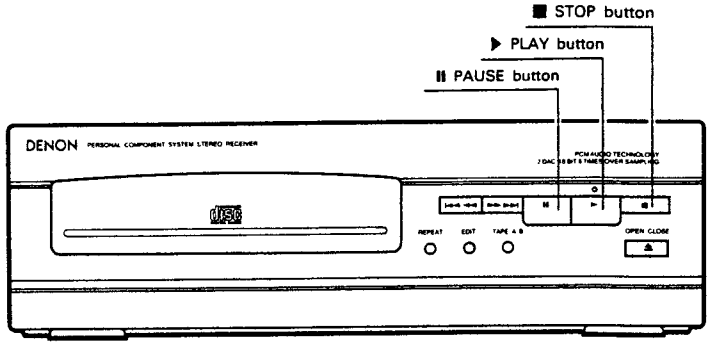
Regular Playback



Example: Playing a CD with 15 tracks and a total playing time of 62 minutes 03 seconds, starting from track 1

1	Press the OPEN/CLOSE button. The disc tray opens. R	OPEN/CLOSE 
2	Set the CD in the disc tray. Refer to Page 13.	
3	Press the OPEN/CLOSE button. The disc tray closes.	OPEN/CLOSE
	The display appears several seconds after the disc tray closes. R	
4	Press the PLAY button. R	

Operations marked R can also be performed using the remote control unit.



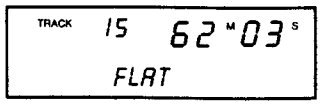
To stop playback temporarily:

Press the PAUSE button.		" ▶ PLAY" turns off and " II PAUSE" appears, and playback is paused at the point the button is pressed.

To resume playback:

Press the PLAY button. R		" II PAUSE" turns off and " ▶ PLAY" appears, and playback is paused at the point the button is pressed.

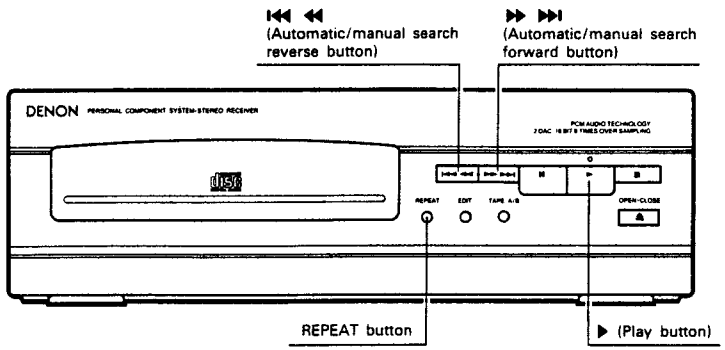
To stop playback:

Press the STOP button. R		

NOTE:

- *"00"* is displayed on the track number section of the display for several seconds after the disc is set, while the data on the number of tracks, playing time, etc., is being read from the innermost section of the disc. After this, the number of tracks and total playing time appear.
- If no disc is loaded, if the disc is upside-down, or if the data on the innermost part of the disc cannot be read properly due to scratches or dirt.

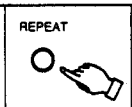
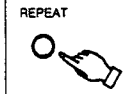
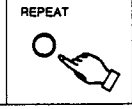
Various Playback Functions



Repeat Playback – Playing All Tracks Repeatedly

1	Press the REPEAT button twice.	REPEAT	REPEAT ALL is displayed. • After the last track is played, playback starts over from the first track. • The all-track repeat mode can also be set by pressing the REPEAT button twice during playback. • The program repeat mode is set if the REPEAT button is pressed during programmed playback.
2	Press the Play button (▶) to start playback.		

A-B Repeat – Repeating a Certain Section

1	Press the REPEAT button during playback.	REPEAT 	REPEAT TRACK is displayed. If nothing else is done, that track is played repeatedly.
2	Press the REPEAT button during playback or before starting playback.	REPEAT 	REPEAT ALL is displayed. If nothing else is done, all tracks are played repeatedly.
3	Press the REPEAT button during playback.	REPEAT	REPEAT A– is displayed. If nothing else is done, that track is played repeatedly.
4	Press the REPEAT button during playback.	REPEAT 	REPEAT A–B is displayed. The A-B section is played repeatedly.
5	Normal playback resumes if the REPEAT button is pressed again.		

This section is played repeatedly.

Quick Search – Moving to the Next Track During Playback

Press the auto search forward button (⏭). R		• The disc moves forward to the beginning of the next track if the auto search forward button (⏭) is pressed once, to the beginning of the second track after the current track if the auto search forward button (⏭) is pressed twice, and so on. • Press the ▶▶ ⏭ (automatic/manual search forward) button to perform this operation from the main unit.

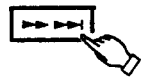
Quick Search – Moving Back to the Beginning of the Current Track During Playback

Press the auto search reverse button (⏮). R		• The disc moves forward to the beginning of the current track if the auto search reverse button (⏮) is pressed once, to the beginning of the previous track if the auto search reverse button (⏮) is pressed twice, and so on. • Press the ⏮ ◀◀ (automatic/manual search reverse) button to perform this operation from the main unit.

Skip Monitor – Searching for Tracks While Listening to the Sound

- Use this function to skip through while listening to the sound. This functions comes in handy for example when searching for a certain section in a long track.
- After finding the desired position with the skip monitor function, simply release the search button to resume normal playback from that point.

1. Forward skip monitor

During playback, press and hold in the manual search forward button (▶▶) to skip forward while listening to the sound. R		• The track number and elapsed playing time of that track are indicated on the display. • If the end of the last track on the disc is reached while pressing the search button, (JJ) appears on the display and the skip monitor operation stops. To resume playback, press the manual search reverse button (◀◀) until (JJ) switches to the track number, then perform a different operation. • Press and hold in the ▶▶ ⏭ (automatic/manual search forward) button to perform this operation from the main unit.

2. Reverse skip monitor

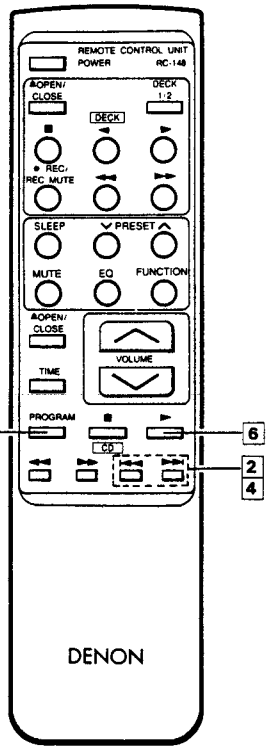
During playback, press and hold in the manual search reverse button (◀◀) to skip backwards while listening to the sound. R		• The track number and elapsed playing time of that track are indicated on the display. • If the beginning of the first track on the disc is reached while pressing the search button, (CC) appears on the display and the skip monitor operation stops. To resume playback, press the manual search forward button (▶▶) until (CC) switches to the track number, then perform a different operation. • Press and hold in the ⏮ ◀◀ (automatic/manual search reverse) button to perform this operation from the main unit.

If the forward or reverse search button is pressed during programmed playback and released at a track which has not been set in the program, playback of the next programmed track begins once that track has been played to the end.

Programmed Playback (remote control only)

Use this function to set certain tracks to play in any order you want.

Example: Programming track 3 to play first, track 5 to play second
CD with 25 tracks and a total playing time of 41 minutes, 37 seconds

1	Press the PROGRAM button on the remote control unit.		TRACK 25 41 M 37 S PROGRAM FLAT
2	Press the ⏮ or ⏭ button to set track 3.		01 P - 03 S PROGRAM FLAT
3	Press the PROGRAM button on the remote control unit.		TRACK 0 01 M 14 S PROGRAM FLAT
4	Press the ⏮ or ⏭ button to set track 5.		02 P- 05 PROGRAM FLAT
5	Press the PROGRAM button on the remote control unit.		TRACK 02 02 M 37 S PROGRAM FLAT
6	Press the ▶ (play) button.		TRACK 03 00 M 01 S PROGRAM FLAT ▶

- Set the program when the CD player is in the stop mode.
- Programming is not possible when the CD is playing.
- To change the track number continuously in step 4 above, press the ◀◀ or ▶▶ button.

NOTES

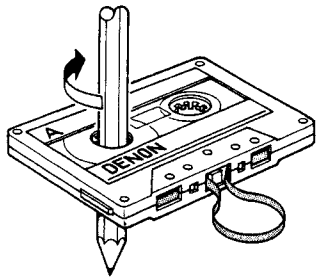
- The numbers of the programmed tracks turn off once the tracks are played.
- The time display will read "— — M — — S" if a track with a number of 31 or greater is set in the program.
- With this set, up to 20 tracks with numbers between 1 to 99 can be set in the program.
- If you attempt to set a track number greater than the number of tracks on the disc, that track number will not be displayed when the button is pressed.
- Programming is also possible while the disc tray is open. In this case, track numbers greater than the number of tracks on the disc can be programmed, but these are ignored when the disc is played.
- No sound is produced for 4 seconds between tracks. This is so that 4-second blanks are created between tracks when programmed tracks are recorded on tapes.
- The entire program is cleared when the disc tray is opened or closed (by pressing the ⏏ button).
- If you make a mistake when setting the program, either press the OPEN/CLOSE key or the STOP key twice and start over.
- Operations possible during programmed playback
  The quick search, pause and skip monitor functions can be used during programmed playback. For the quick search function, to move to the beginning of the previous track, press the ⏮ button once, then once again while the time display reads "00 M 00 S".
  To move to the beginning of the following track, press the ⏭ button once, regardless of the time display.

9 BEFORE RECORDING AND PLAYBACK

Cassette Tapes

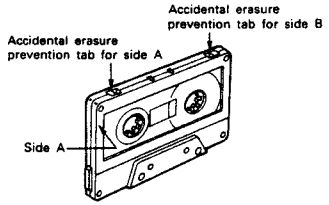
■ Cautions on Handling

- C-120 cassette tapes
  Avoid using 120-minute cassette tapes, as they have extremely thin tape which tends to get caught on the capstans or pinch rollers.
- Tape slack
  If the tape is slack, it may get tangled or be damaged. Take up slack with a pencil, etc., before loading the cassette.



■ Protecting Cassette Tapes From Being Erased Accidentally

- Cassette tapes are equipped with accidental erasure prevention tabs. To protect recorded tapes from being erased accidentally, use a screwdriver, etc., and break these tabs off.
- To record on a cassette tape whose accidental erasure prevention tabs have been broken off, place a piece of cellophane tape over the hole.



■ Cautions on Storing

- Avoid storing in the following places:
  - Hot, humid places
  - Dusty places
  - Places exposed to direct sunlight
  - Near magnetic forces (TVs, speakers, etc.)
- Store the cassette tape in a case equipped with stoppers to keep the tape from coming slack.

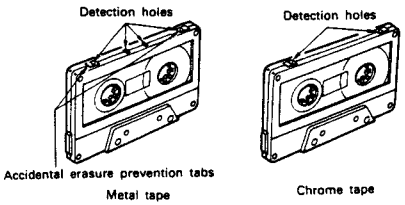
Using the Tape Counter

- Reset the counter to 0000 by pressing the COUNTER RESET button.
- The counter indicates the position of the tape for the deck indicated by the DECK 1 and DECK 2 indicators.
- If the playback mode is set directly after rewinding the tape in the recording or playback mode, the indication on the tape counter may differ slightly from the indication when recording or playback was actually started. To avoid this, set the deck to the stop mode first before setting the playback mode after rewinding the tape.

Auto Tape Selector Mechanism

This deck is equipped with an auto tape selector mechanism which uses the detection holes in the cassette halves to automatically set the recording bias and equalization best suited for that type of tape.

- Do not use ferrichrome tapes.
- Use metal tapes equipped with detection holes.

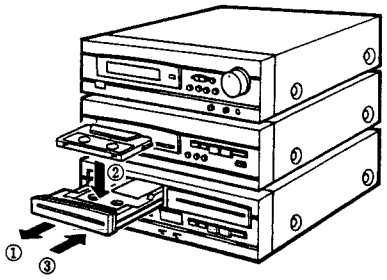


NOTES

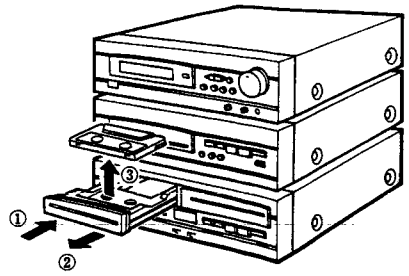
- Set the cassette tape with the exposed side facing the inside of the set. Setting the cassette tape in the other direction can damage the set.
- Do not press the OPEN/CLOSE button during playback or recording.
  Always press the stop button before pressing the OPEN/CLOSE button.

Common for Deck 1 and Deck 2

- **Loading**
  ① Press the OPEN/CLOSE button (⏏) to open the cassette tray.
  ② Set the tape in the cassette tray with the open side (on which tape is exposed) facing away from you.
  ③ Press the OPEN/CLOSE button again to close the tray.



- **Unloading**
  ① Press the STOP button (■). (Deck 1 or Deck 2)
  ② Press the OPEN/CLOSE (⏏) button to open the cassette tray.
  ③ Remove the cassette tape.



Check the following before recording or playing cassette tapes:

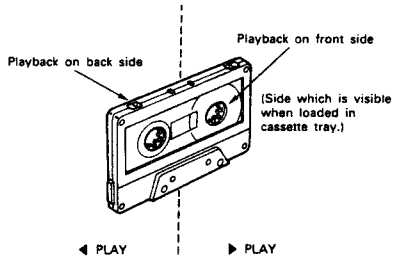
1. Is the head dirty? ..... The sound quality will be poor if the head is dirty. Refer to Page 25.
2. Are the accidental erasure prevention tabs broken off? ..... Recording is not possible if the accidental erasure prevention tabs broken off. Refer to Page 17.

Auto Reverse

This deck is equipped with an auto reverse mechanism, so cassette tapes can be played and recorded on both sides or played continuously without having to turn them over.

■ Direction of tape travel

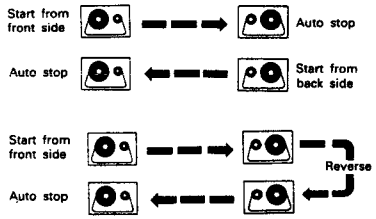
This deck has two play buttons, one for the forward direction (front side) and another for the reverse direction (back side). The side being played can be changed during playback by pressing the opposite play button.



■ Reverse mode

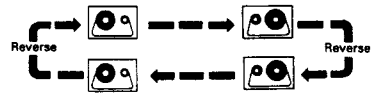
Set the reverse mode switch (REV. MODE) as follows:

- **Single-side recording/playback mode (⇉)**
  In this position, only the front side or the back side of the cassette tape is played or recorded. (The tape stops automatically when the end of that side is reached.)
- **Double-side (reverse) recording/playback mode (⇄)**
  In this position, when the end of the front side is reached, recording or playback automatically switches to the back side and continues from there. (The tape stops automatically when the end of the back side is reached.)



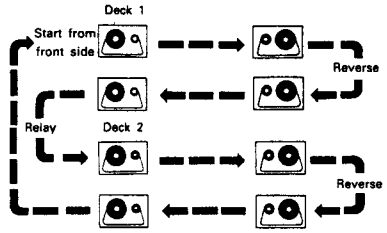
* If you start playing or recording from the back side, the tape will stop automatically at the end of the back side.

- **Continuous mode (⇆)**
  Playback continues until the STOP button is pressed, but stops automatically after both sides have been played five times.

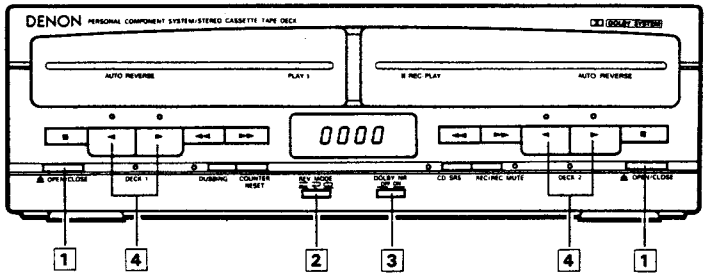


* The reverse recording/playback mode (⇄) is set automatically during recording.

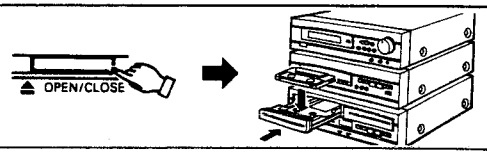
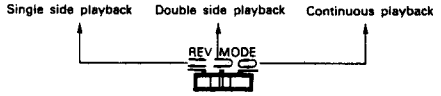
- **Relay playback mode**
  When tapes are loaded in both decks
  Playback continues from deck 1 onto deck 2, as shown on the diagram at the right.



10 PLAYING CASSETTE TAPES (Single Side Playback, Double Side Playback and Continuous Playback)

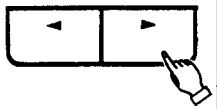
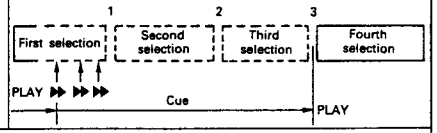
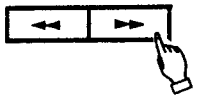


- For both Deck 1 and Deck 2
- When operating from the remote control unit, operation switches between Deck 1 and Deck 2 each time the DECK 1/2 button is pressed. The indicator for the selected deck (DECK 1 or DECK 2) lights.

1	Press the OPEN/CLOSE, and load a recorded tape into the tray. Refer to Page 17.	
2	Set the reverse mode selector. Refer to Page 8.	
3	Set the Dolby NR selector. Refer to Page 8.	Set the selector to "ON" for tapes recorded in Dolby NR.
4	Press the play button (▶ or ◀). R	Playback begins in the direction of the button which was pressed.
Press the ■ button to stop playback. These operations can be performed from the remote control unit once tapes are loaded. R		
Operations marked R can also be performed using the remote control unit.		

Using the MS (Music Search) Function

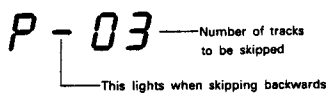
- Use this function to move to the beginning of the following selection or return to the beginning of the current selection. (For both Deck 1 and Deck 2)
- There must be blank spaces of at least 4 seconds between the selections on the tape for the search function to work.

1	Press ▶ or ◀ R		• In the rewind direction, playback starts from the beginning of the selection which is currently playing, and in the fast-forward direction, playback starts from the beginning of the following selection. • For the normal fast-forward or rewind operations, press the ■ stop button before pressing the ▶▶ or ◀◀ button. The tape skips by a number of selections equal to the number of times the ▶▶ or ◀◀ button is pressed. For example: 
2	Press ▶▶ or ◀◀ R		
Operations marked R can also be performed using the remote control unit.			

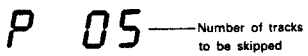
Display During the Music Search Operation

During the music search operation, the number of selections being skipped is indicated on the tape counter, and this number decreases each time a blank section is detected (for example, 3 → 2 → 1).

- When skipping back to a previous selection



- When skipping ahead to a following selection



11 CONVENIENT FUNCTIONS

Preset Equalizer Settings

This set includes preset equalizer settings which can be selected according to the type of music or application. There are six preset equalizer modes which can be called out easily either on the main unit or from the remote control unit.
In addition, these modes are indicated on the receiver's display.

DISCO: Use this mode for strongly modulated sound.
VOCAL: Use this mode to create glossy vocals.
ROCK: Use this mode for powerful sound.
BGM: Use this mode for easy listening.
SDB: Use this mode to create a more powerful bass sound.
FLAT: Use this mode for straight, pure sound.

12 USING THE TIMER

Setting the Timer

■ Notes on Setting the Timer

- Always set the current time beforehand.
- Be sure to preset radio stations before setting the timer. (Refer to "Presetting AM and FM Stations" on Page 12.)
- Turn the standby switch off when not using the timer.

■ Types of Timers:

TIMER: This can be used to turn the power on and off at the same time each day. ("Good morning music")
SLEEP TIMER: This can be used to set the power to turn off in intervals of 10 minutes between 60 and 10 minutes, using the remote control unit. ("Good night music")

Power Failure

If there should be a power failure or if the power cord should be unplugged from the power outlet, "0:00" or the time at which the power failed flashes on the time display. If this happens, reset the current time.
(Reset the current time and timer settings.)

Checking the Timer Settings

To check the timer settings, turn the receiver's power on then press the timer button. Next, press the ENTER/NEXT button repeatedly to display the following: Timer start mode → reception band, preset channel number and timer on time → timer off time.
Press the ENTER/NEXT button once again to return to the frequency display.
If the timer on or off times are not set, "0:00" flashes and the display does not switch to the next step.

Changing the Timer Settings

When timer setting operations are repeated, the old timer settings are cleared and the new ones are set.

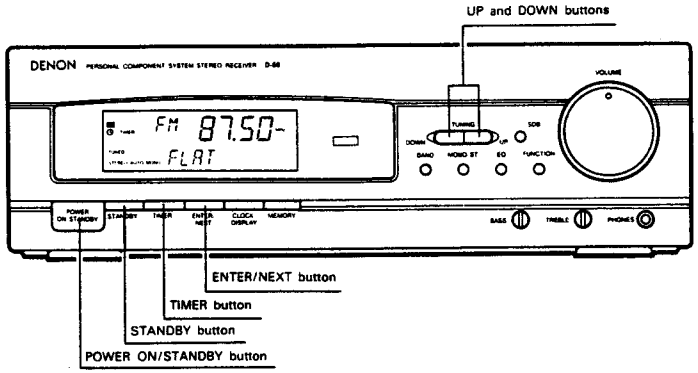
Clearing the Timer Settings

Press the TIMER key once, then press it again while "FUNC" is displayed to clear the timer settings.

Cautions on Setting the Timer

The timer settings are given priority, so when the timer on time is reached, the function switches to that function set for the timer.

Setting the Timer



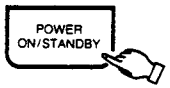
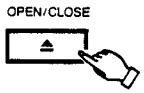
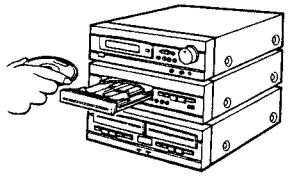
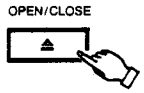
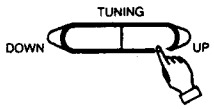
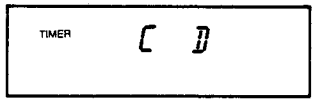
Example: Setting the timer to turn on at 12:35 and off at 12:56
Tuner (FM 102.50 MHz set at preset number "3")

1	Press the POWER ON/STANDBY button to turn the power on.	POWER ON/STANDBY	
2	Press the TIMER button.	TIMER	TIMER FUN C
3	Press the UP and DOWN buttons to display "TUNER:".	TUNING DOWN UP	TIMER TUN ER
4	Press the ENTER/NEXT buttons.	ENTER/NEXT	TIMER FM 102.50 MHz AUTO MONO P - -
5	Press the UP and DOWN buttons to set the preset number.	TUNING DOWN UP	TIMER FM 102.50 MHz AUTO MONO P 3
6	Press the ENTER/NEXT buttons.	ENTER/NEXT	TIMER 00:00 MHz AUTO MONO ON
7	Use the UP and DOWN buttons to set hour at which the timer is to turn on.	TUNING DOWN UP	TIMER 12:00 MHz AUTO MONO ON
8	Press the ENTER/NEXT button.	ENTER NEXT	TIMER 12:00 MHz AUTO MONO ON
9	Use the UP and DOWN buttons to set minutes at which the timer is to turn on.	TUNING DOWN UP	TIMER 12:35 MHz AUTO MONO ON
10	Press the ENTER/NEXT button.	ENTER NEXT	TIMER 0:00 MHz AUTO MONO OFF
11	Use the UP and DOWN buttons to set hour at which the timer is to turn on.	TUNING DOWN UP	TIMER 12:00 MHz AUTO MONO OFF
12	Press the ENTER/NEXT button.	ENTER NEXT	TIMER 12:00 MHz AUTO MONO OFF
13	Use the UP and DOWN buttons to set minutes at which the timer is to turn on.	TUNING DOWN UP	TIMER 12:56 MHz AUTO MONO OFF
14	Press the ENTER/NEXT button.	ENTER NEXT	TIMER FM 102.50 MHz AUTO MONO FLAT
15	Press the STANDBY button.	STANDBY	TIMER FM 102.50 MHz AUTO MONO FLAT
16	Press the POWER ON/STANDBY button.	POWER ON/STANDBY	TIMER 10.05

Press the POWER ON/STANDBY button.
When the STANDBY button is pressed and the " ◷ " mark is lit, the timer will function at the same times each day. To turn the timer off, press the STANDBY button to turn the " ◷ " mark off.

Ways to Use the Timer

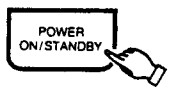
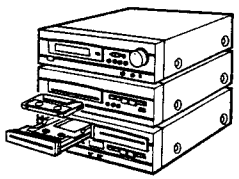
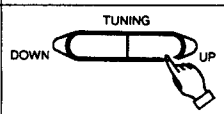
Example: Waking up to the music of a compact disc

1	Press the receiver's POWER ON/STANDBY button to turn the power on.		
2	Press the CD player's OPEN/CLOSE button to open the disc tray. R		
3	Load the CD in the disc tray. Refer to Page 13.		
4	Press the CD player's OPEN/CLOSE button again to close the disc tray. R		
5	Press the receiver's TIMER buttons.		
6	Use the receiver's UP and DOWN buttons to display "CD".		
7	Follow steps 6 to 16 under "Setting the Timer" on Page 20.		

Operations marked R can also be performed using the remote control unit.

Ways to Use the Timer

Example: Waking up to the music of a cassette tape

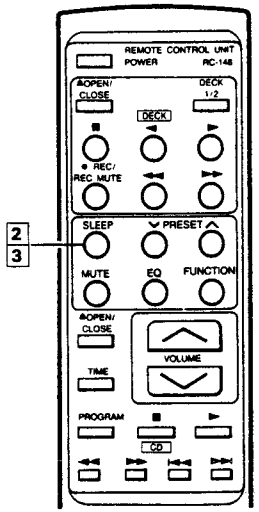
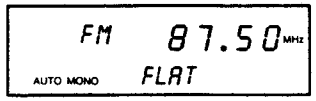
1	Press the receiver's POWER ON/STANDBY button to turn the power on.		
2	Press the cassette deck's OPEN/CLOSE button to open the tray. R		
3	Load the cassette tape in the tray. Refer to Page 17.		
4	Press the cassette deck's OPEN/CLOSE button again to close the tray. R		
5	Press the receiver's TIMER buttons.		
6	Use the receiver's UP and DOWN buttons to display "TAPE".		
7	Follow steps 6 to 16 under "Setting the Timer" on Page 20.		

- The tape will be played in the direction indicated by the tape direction indicators. Check that the tape direction and reverse mode settings are as desired. (Refer to "Using the Auto Reverse Function" on Page 18.)
- When using the timer, the tape is played in direction indicated for Deck 2.

Operations marked R can also be performed using the remote control unit.

Setting the Sleep Timer

Example: Setting the power to turn off in 30 minutes (remote control only)

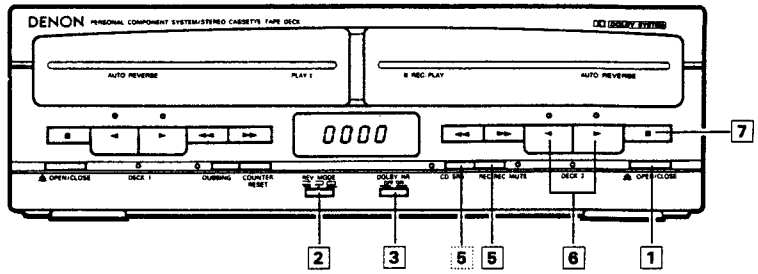
1	Currently receiving FM 87.50 MHz		
2	Press the SLEEP button.		
3	Press the SLEEP button 3 times successively.		
4	The original display reappears after 5 seconds.		

To cancel the sleep timer:
Press the SLEEP button repeatedly until the display reads "0". The power turns off. Now press the POWER switch to turn the power back on.

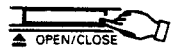
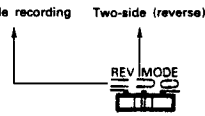
NOTES

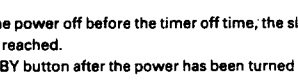
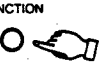
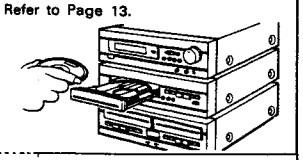
- If the sleep timer is set to turn the power off before the timer off time, the sleep timer is given priority, and the power turns off when the sleep timer time is reached.
- Do not press the TIMER STANDBY button after the power has been turned on with the timer. If this is done, the timer will not function properly.
- If the same time is set for the on time and off time, the power will not turn on even if the standby indicator is on.
- If the timer is set for an AM or FM station and the timer on time is reached while listening to another station, the station switches to the station which was set with the timer.

13 RECORDING CASSETTE TAPES



- Check that the accidental erasure prevention tabs on the tape onto which you want to record are intact. Recording is not possible if the accidental erasure prevention tabs are broken off. Refer to Page 17.

1	Press the OPEN/CLOSE button for Deck 2 and load the tape onto which you want to record. Refer to Page 17.	
2	Set the reverse mode selector. Refer to Page 8.	
3	Set the DOLBY NR selector. Refer to Page 8.	Set to the "ON" position to record in Dolby NR.

4	To record the radio:	To record from a VDP or VCR:	To record a CD:
	Press the receiver's band selector button.  Select the station you want to record. R	Press the receiver's FUNCTION button and select PHONO or LINE.  Start playback on the VDP or VCR. R	Set the disc in the CD player. Refer to Page 13. 
5	Press the REC/REC MUTE button. R The recording indicator lights.		5 Press the CD SRS button. The recording indicator lights and recording starts.
6	Press the play button (▶ or ◀). (Recording starts) R The recording indicator lights.		

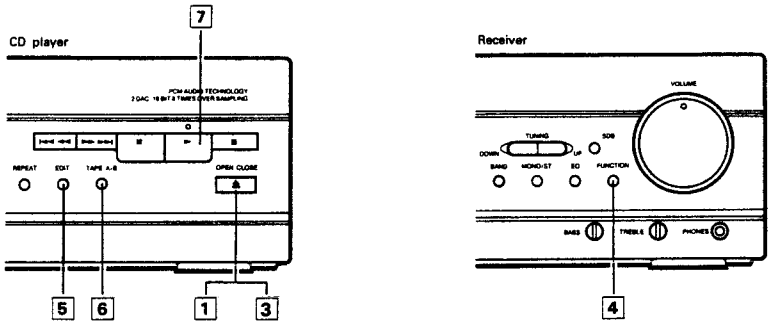
To stop recording, press the ■ button. R

Operations marked R can also be performed using the remote control unit.

Edited Recording onto Sides A and B of a Tape (EDIT)

NOTES

- For discs containing 21 or more tracks, editing is not possible for track numbers 21 and up. (Editing is only possible for up to 20 tracks.)
- Editing is cancelled if the CD player's stop button (■) or OPEN/CLOSE button (⏏) is pressed.
- Set the deck's reverse mode selector to the ⇄ position.
- Set the cassette tape onto which you want to record in Deck 2 with side A on the top when performing the editing operations. The beginning of the tape is searched for automatically before recording starts.
- Note that in some cases it is not possible to record all the tracks on the CD onto the tape, even if the tape is longer than the total playing time of the CD, due to the combination of the tracks being recorded onto sides A and B.



Automatic Edited Recording – Recording the CD's Tracks in Order

1	Press the CD player's OPEN/CLOSE button to open the disc tray. R	OPEN/CLOSE	TRACK 00 00 M 00 S FLAT
2	Load the CD in the disc tray. Refer to Page 13.		
3	Press the CD player's OPEN/CLOSE button. The disc tray closes. R The display appears several seconds after the disc tray closes.	OPEN/CLOSE	TRACK 18 56 M 00 S FLAT
4	Press the receiver's FUNCTION button to set the function to "CD". R	FUNCTION	
5	Press the EDIT button to select the length of the tape. Press the EDIT button four times when using a 60-minute (C-60) tape. (The tape length is the total time for sides A and B.)	EDIT	
	The display changes as follows each time the EDIT button is pressed: C-46 (46-minute tape) → C-50 (50-minute tape) → C-54 (54-minute tape) → C-60 (60-minute tape) → C-74 (74-minute tape) → C-90 (90-minute tape) → C-120 (120-minute tape) → C-00 When this is displayed, the desired recording time can be set. Example: For a 36-minute tape: Use the ⏮ ◀◀ or ▶▶ ⏭ button to set to "36". If you make a mistake, press the EDIT button to display "C-00", then start over.		C- 60 56 M 00 S PROGRAM A TAPE B EDIT C- 60 02 M 40 S PROGRAM A TAPE REMAIN
6	Press the CD player's TAPE A/B button. The display switches between the display for sides A and B each time the button is pressed. (Use this to check the extra time on side B.)	TAPE A/B	C- 60 01 M 20 S PROGRAM A TAPE B REMAIN
7	Press the CD player's ▶ (play) button. R		TRACK 01 00 M 01 S PROGRAM A TAPE EDIT ▶

Operations marked R can also be performed using the remote control unit.

NOTE:
Only the CD player's STOP and OPEN/CLOSE keys and the cassette deck's STOP key will function during edited recording.

Programmed Edited Recording – Recording Certain Tracks in Any Order

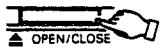
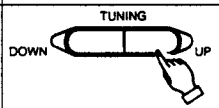
1	Follow the instructions under "Programmed Playback" on Page 16 to program the tracks.
2	Perform steps 5 to 7 under "Automatic Edited Recording" on Page 23.

CAUTIONS

- When performing edited recording onto a tape which already contains a recording and which is longer than the set time, the previously recorded section after the newly recorded part of side B is not erased, so erase the tape before starting.
- When the editing function is used, a blank section of 4 seconds is created between all of the selections on the tape. Because of this, the times of the actual blank sections between the tracks on the disc and the blank sections between the selections on the tape are different, so the displayed time is slightly different from the actual remaining time on the tape.

14 UNATTENDED RECORDING

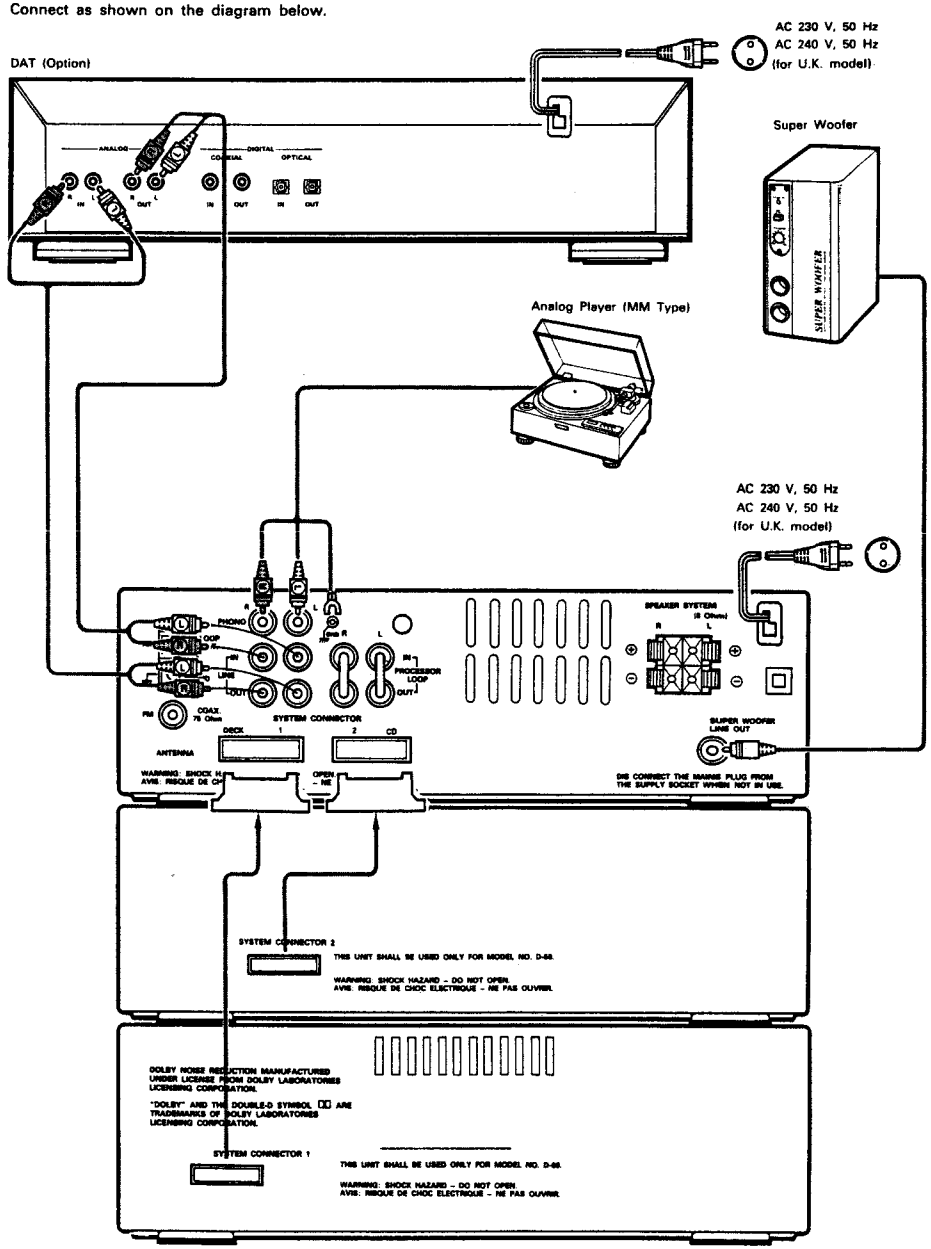
Example: Unattended recording of radio programs ("air check")

1	Press the receiver's POWER ON/STANDBY button to turn the power on.		
2	Press the Deck 2 OPEN/CLOSE button to open the tray. R		
3	Load the cassette tape onto which you want to record into the tray. Refer to Page 17.		
4	Press the Deck 2 OPEN/CLOSE button again to close the tray. R		
5	Press the receiver's TIMER button.		
6	Press the receiver's UP and DOWN button to display "AIR.CH".		
7	Perform steps 4 to 16 under "Setting the Timer" on Page 20.		

- When recording using the timer, the tape is played in direction indicated for Deck 2.

15 CONNECTIONS TO OTHER COMPONENTS

Connect as shown on the diagram below.



16 TROUBLESHOOTING

1. Check that connections are proper.
2. Check that you are operating the system according to the instructions in the manual.

Check the following points if the system does not seem to be working properly.
If the problem is not solved after checking these points carefully, the system may be malfunctioning. Turn the power off and contact your store of purchase or your nearest DENON service center or office.

	Symptom	Cause	Measures	See Page
Common	Power does not turn on when POWER button pressed.	• Power cord not plugged into outlet.	• Plug cord into outlet properly.	5
	No sound produced from speakers.	• VOLUME control set to minimum. • Headphones are connected. • Speaker cords not connected to speaker terminals.	• Turn VOLUME control clockwise (↷). • Disconnect headphones. • Connect speaker cords properly.	7 7 5
	Trebles not produced or stereo effect not clear.	• Speaker's polarities (⊕ and ⊖) not matched.	• Connect speaker cords properly.	5
	Source other than the one desired is heard.	• Function selector buttons not set properly.	• Set to desired function.	7
Deck	Recording not performed when REC/REC MUTE button pressed.	• No cassette tape loaded. • Cassette tape's tabs broken off.	• Load tape. • Apply cellophane tape over holes.	17 17
	Sound is interrupted during playback or recording, or treble sound low.	• Heads dirty. • Tape stretched.	• Clean. • Replace tape.	25 –
	Wow is heavy during playback or recording.	• Capstans or pinch rollers dirty.	• Clean.	25
Receiver	Hissing noise heard during FM reception.	• Antenna not pointed in proper direction. • Signals weak.	• Change direction of antenna. • Install outdoor antenna.	6 5
	Hissing or scratchy noise heard during AM reception.	• Noise from TV or interference from other stations.	• Turn TV off. • Set system in different direction. • Install outdoor antenna.	– – 6
	Humming noise heard during AM reception.	• Signals over power cord modulated by power source frequency.	• Plug in cord in opposite direction. • Install outdoor antenna.	5 5
CD Player	Disc loaded but number of tracks not displayed.	• Disc loaded upside-down. • Disc dirty. • Non-standard disc loaded.	• Reload disc. • Clean disc. • Replace with standard disc.	13 13 13
	Operation not performed when buttons pressed, or playback stops in middle of track.	• Disc loaded upside-down. • Foreign object in disc holder. • Disc dirty. • Disc scratched.	• Reload disc. • Remove disc and remove foreign object. • Clean disc. • Replace with non-scratched disc.	13 13 13 –
	Sound skips.	• Dust, fingerprints, or spittle on disc. • Disc scratched. • Player set in shaky, unstable place.	• Clean disc. • Replace with non-scratched disc. • Set player in stable place.	13 – –

Normal operation may not be possible if there is dirt or other substances on the surface of the internal objective lens or sensor.
These parts must be cleaned periodically depending on the place of installation.
For details, contact your store of purchase.

Avoid using ultrasonic humidifiers nearby.
If ultrasonic humidifiers are used nearby, the calcium, etc., included in the water may be scattered into the air, causing white dust to accumulate on the surface of the objective lens or sensor, resulting in improper operation.

Condensation Water droplets (or condensation) may form on the optical lens or disc in the following cases:
- Just after a heater is turned on in the room.
- When the set is placed in a steamy or humid room.
- When the set is moved abruptly from a cold place to a warm room.

If Condensation Occurs
The signals on the disc cannot be read properly and the CD player may not operate properly.
To get rid of the condensation, turn the power on and let the set sit for about one hour. Operation should be normal after this.

This system consists of precision components using microprocessors. Avoid using it in places where there is much external noise. If used is such places, the system may not operate properly, but this is not a problem with the system. If the system does not operate properly, try performing the desired operation again.

17 IMPORTANT INFORMATION

- **Cleaning the Head**
  After the cassette deck is used for a while, powder from tapes and dirt get on the head, decreasing the sound quality.

NOTE:
Some cleaning sets sold in stores have a polishing effect and can damage the head.

- **Demagnetizing the Head**
  The head becomes magnetized after the deck is used over a long period of time or if the head is exposed to magnetic forces. This results in noise and reduced treble.
  If the head is magnetized, use a cassette tape head demagnetizer (eraser), available in stores, and demagnetize it.
  - For details, read the demagnetizer's operating instructions.